

DELFIN · II 1/2D EX H IIC T85°C DA/DB -- II 2/2G EX H IIC T6 GB/GB

# Delfin DM AIREX 25V 1/2D - 2/2G



The Delfin DM AIREX 25V 1/2D-2/2G is the flagship combi-certified AIREX -- 25 venturi units deliver 590 m<sup>3</sup>/h airflow and 5000 mmH<sub>2</sub>O vacuum. Double certificate (II 1/2D Ex h and II 2/2G Ex h IIC), gas group IIC (including hydrogen and acetylene), 100-litre tank and full AISI 304 construction. Built for large central suction installations in combi-zones where both gas risk and high dust volume must be handled. Air consumption is 2500 nl/min at 6 bar -- requires strong compressor infrastructure.

## APPLICATIONS

- Large refineries and chemical plants with hydrogen zones and high dust volume
- Central suction in combi-zones at large facilities with multiple operators in parallel
- Process plants where the 19V lacks sufficient airflow capacity
- Combi-zones with extreme demands for rapid cleaning and gas group IIC
- Fixed central suction systems with multiple simultaneous suction points

# Technical specifications

<b>ATEX marking</b>	II 1/2D Ex h IIIC T85°C Da/Db -- II 2/2G Ex h IIC T6 Gb/Gb
<b>Internal / external zone</b>	20 / 21
<b>Motor type</b>	25 venturi-enheder, pneumatisk drift (trykluft)
<b>Airflow</b>	590 m <sup>3</sup> /h
<b>Vacuum</b>	490 mbar (5000 mmH <sub>2</sub> O)
<b>Container</b>	100 L
<b>Sound pressure</b>	74 dB(A)
<b>Filter class</b>	H class
<b>Filter type</b>	HEPA H14 (EN 1822-5), 99,995 % ved MPPS, 26.000 cm <sup>2</sup> filterflade
<b>Primary filter</b>	Antistatisk polyester klasse ANT M PTFE (star/lommefilter, 30.000 cm <sup>2</sup> , diameter 500 mm).
<b>Cleaning system</b>	Manuel ryste-rensning af lommefilter
<b>Collection system</b>	Plastic bag
<b>Material</b>	AISI 304 rustfrit staal (helkonstruktion inkl. beholder, filterkammer og hoved)
<b>Air consumption</b>	2500 nl/min
<b>Supply pressure</b>	6 bar
<b>Air supply hose</b>	Diameter 12 mm
<b>Venturi units</b>	25 pcs
<b>Inlet</b>	Diameter 80 mm
<b>Dimensions (L x W x H)</b>	620 x 620 x 1600 mm
<b>Weight</b>	80 kg

# Questions and answers

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## Why pneumatic venturi drive instead of an electric motor?

Venturi units have no moving parts, no brushes and no motor windings. That eliminates two things at once: a potential ignition source in an explosive atmosphere, and the maintenance burden of motor, bearings and cooling. The vacuum can run continuously for as long as compressed air is supplied, and there are no electrical components to certify or inspect. The trade-off is air consumption -- venturi makes most sense where compressed air is already available (production plants, refineries, pharmaceutical facilities).

## Why is the 1/2D-2/2G model categorised as ATEX Combi?

This model is double-certified: "II 1/2D" covers dust (internal Zone 20, external Zone 21), and "II 2/2G" covers gas (Zone 1 both inside and outside). Since it can operate safely in areas where dust and gas atmospheres may occur simultaneously, it belongs in the ATEX Combi category in our catalogue. Equivalent to IEC notation II 1/2GD. Typical use: refineries, chemical plants, drying processes and fuel handling where both atmospheres can occur.

## What compressed-air installation is required?

The unit requires clean, dry compressed air at 6 bar with a 12 mm ID supply hose. Air consumption at full load is 2500 nl/min, which corresponds to a mid-range industrial compressor, so the installation must be able to sustain this. Always fit an air filter upstream to protect the venturi nozzles.

## When is the 25V combi needed over the 19V combi?

Same logic as for the 1/3D variants: 25V consumes 63 % more compressed air for 27 % more airflow. Choose 25V if you need to cover long central hoses or many parallel suction points, and the compressed-air installation can sustain 2500 nl/min. Otherwise the 19V variant gives better operating economy and the same ATEX certification (II 1/2D and II 2/2G IIC).

# Contact and advisory

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